

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

FEDERAL HOUSING FINANCE AGENCY,
AS CONSERVATOR FOR THE FEDERAL
NATIONAL MORTGAGE ASSOCIATION
AND THE FEDERAL HOME LOAN
MORTGAGE CORPORATION,

Plaintiff,

-against-

NOMURA HOLDING AMERICA, INC., et al.,

Defendants.

11 CIV 6201 (DLC)

CORRECTED DIRECT TESTIMONY OF CHARLES CIPIONE

I, Charles Cipione, declare as follows:

1. I am a Managing Director with AlixPartners, LLP ("AlixPartners"), a financial and operational consultancy company. I am a founding member of AlixPartners Information Management Services business unit. I have more than 20 years of professional experience reviewing, analyzing, designing, and implementing technology solutions focused on addressing litigation, financial, and operational subject matters.

2. AlixPartners has been retained by Quinn Emanuel Urquhart & Sullivan, LLP, counsel for Plaintiff Federal Housing Finance Agency ("FHFA"), to provide litigation consulting and information management services for the above-captioned action. On November 10, 2014, I submitted the Declaration Of Charles Cipione In Support Of Plaintiff's Motion For Partial Summary Judgment On Defendants' Due Diligence And Reasonable Care Defenses ("Declaration"). The Declaration describes the databases and exhibits that my team at AlixPartners, who worked under my direction and control, created based on documents and data



produced in this Action, and that FHFA's counsel provided to me. The computer scripts that my team used to generate the databases and exhibits were provided to the above-captioned defendants ("Defendants") along with the Declaration. After the Declaration was submitted, Defendants produced new documents and data in this Action, which FHFA's counsel provided to me. As a result, I have updated certain of the databases and exhibits, as described in more detail below.

3. My testimony is organized as follows. First, I describe the source materials and the construction of several databases. As noted below, the databases my team constructed rely in part on information provided by and relied on by Defendants' expert, Charles Grice. Second, I describe the exhibits that are generated from these databases, as well as a few additional exhibits.¹

I. Source Materials and the Construction of the Databases

A. Source Materials

4. FHFA's counsel provided AlixPartners with (1) a copy of the Expert Report of Charles Grice, dated July 9, 2014 ("Grice Nomura Report"), which evaluated the diligence performed by Defendants Nomura Holding America Inc., Nomura Asset Acceptance Corporation, Nomura Home Equity Loan, Inc., Nomura Credit & Capital Inc., Nomura Securities International, Inc., David Findlay, John McCarthy, John P. Graham, Nathan Gorin, and N. Dante LaRocca (collectively, "Nomura"), and all of the appendices, exhibits, and supporting materials that accompanied the Grice Nomura Report; and (2) a copy of the Expert Report of Charles Grice, dated July 9, 2014 ("Grice RBS Report"), which evaluated the diligence performed by

¹ As described below, the Plaintiff's exhibits discussed ¶¶ 71-77 *infra*, were created using data contained in worksheets that Defendants produced in this Action, but that were not incorporated into the databases.

defendant RBS Securities Inc. (f/k/a Greenwich Capital Markets, Inc.) (“RBS”) on the Nomura loans, and all of the appendices and supporting materials that accompanied the Grice RBS Report. I will refer to both reports collectively as the “Grice Reports.”

5. These materials included exhibits, produced as Excel workbooks, and lists of reliance materials used in the Grice Reports. Exhibit 2 to the Grice Nomura Report (“Grice Exhibit 2”) provides a list of 194 pools of loans purchased by Nomura and the number of loans from each pool that were included in the supporting loan groups (“SLGs”) backing the certificates purchased by the Federal National Mortgage Association (“Fannie Mae”) and the Federal Home Loan Mortgage Corporation (“Freddie Mac”) in the seven residential mortgage-backed securitizations at issue in this case (the “Securitizations”). Nomura provided a script named “Trade Pool Analysis” and an Excel worksheet named “Trade Pool List with Bates Numbers” associated with Grice Exhibit 2. I used the materials in the worksheet and the script to re-create Grice Exhibit 2. A copy of my re-creation of Grice Exhibit 2 is attached as **Plaintiff’s Exhibit (“PX”) 1571**.²

6. Exhibit 3 to the Grice Nomura Report (“Grice Exhibit 3”) provides a list of 186 pools³ of loans purchased by Nomura, the total number of loans in each pool, and the total number of loans in each pool subject to credit and compliance diligence. Nomura provided a list of documents used to create Grice Exhibit 3 in Appendix A to a letter dated September 15, 2014 (“Sept. 15 Appendix A”). I used the materials in the Sept. 15 Appendix A in attempting to re-

² As Mr. Grice states in Note 2 to Grice Exhibit 2, Loan [REDACTED] is in the SLG to NHELI 2006-HE3, but information is not available to determine the channel through which Nomura acquired the loan. I have included this loan in the total number of loans in the SLGs, but have not assigned it to a specific pool.

³ As Mr. Grice states in Note 4 to Grice Exhibit 3, credit and compliance sample information was not available for eight loan pools. Based on documents produced in this Action, I have identified credit and compliance information for all but four loan pools.

create Grice Exhibit 3. Based on those materials, I identified three incorrect values on Grice Exhibit 3 relating to the total number of loans subject to credit and compliance due diligence in the Fremont SP02, Fremont SP04, and Millennium SP02 loan pools. A copy of my re-creation of Grice Exhibit 3 is attached as **PX 1572**. Also included in Exhibit 2 is a worksheet labeled “Corrected Ex. 3” that lists 70 loan pools for which, based on loan-level credit and compliance diligence reports produced by Nomura and Clayton Holdings LLC (“Clayton”), the total number of loans subject to due diligence does not match the total number of loans listed in Grice Exhibit 3.

7. Exhibit 4 to the Grice Nomura Report (“Grice Exhibit 4”) provides the number of loans in each of the relevant SLGs, the number of loans in each of the relevant SLGs subject to credit and compliance diligence, and the percentage of loans in each of the relevant SLGs subject to credit and compliance diligence. Nomura provided a list of documents used to create Exhibit 4 in the Sept. 15 Appendix A. I used the materials in the Sept. 15 Appendix A to re-create Grice Exhibit 4. A copy of my re-creation of Grice Exhibit 4 is attached as **PX 1573**.

8. Based on the information described above, as well as additional documents produced by Nomura, RBS, and Clayton, FHFA’s counsel instructed AlixPartners to construct the databases and exhibits as described below. A complete listing of the documents used to create each database is included in **Appendix A**. In addition, the computer files used to create each database are included in a .zip file labeled **Appendix B**. I first describe these databases below, and then describe the exhibits I created based on instructions from FHFA’s counsel.

B. The Master Database

9. I created the “Master Database” attached as **PX 1574**. The Master Database is composed of loan-level worksheets produced by Nomura and Clayton for the acquisition pools from which the relevant SLGs were constructed, the Global Loan Number (an AlixPartners-

generated identification number), and data points from (1) loan tapes for the Securitizations, (2) Exhibits 2A and 2B to the October 6, 2014 Rebuttal Expert Report of Robert W. Hunter (“Hunter Report Exs. 2A and 2B”), (3) Table 3 of FHFA’s June 28, 2012 Amended Complaint in the above-captioned action (“Amended Complaint Table 3”); (4) Settlement date information derived by FHFA’s counsel from a Nomura trade list bearing the Bates number NOM-FHFA_05663880 (“Nomura Trade List”) (**PX 865**); and (5) the constructed Credit and Compliance Database, described in Section(I)(C) below.

10. The Master Database provides a loan number identifier named “LMS Loan ID” and, where available, an alternative loan number of each loan in the 194 acquisition pools from which the relevant SLGs were constructed.⁴ Because these loan numbers were imported from worksheets used to create Grice Exhibits 2 and 3, I used the “Trade Pool List with Bates Numbers” worksheet and the Sept. 15 Appendix A to link the loan numbers to specific acquisition pools.⁵

11. I then matched the loan numbers from the pool worksheets to the loan numbers in loan tapes for the Securitizations. Where the loan numbers matched, I noted which Securitization the loan matched to and whether the loan was in the relevant SLG.⁶

⁴ The Master Database also includes loans purchased by Nomura through its loan-by-loan channel and one loan for which the acquisition pool is unknown.

⁵ I used worksheets not relied upon by Mr. Grice for six acquisition pools: Americorps SP01 (**PX E2178**), Cameron Financial SP04 (**PX E0012**), Coastal Capital SP02 (**PX E0015**), Fund America SP03 (**PX E1690**), MSTOR 01SP (**PX E0002**), and Pinnacle Financial 29 (**PX E0110**).

⁶ In the case of 180 loans, the loan numbers from the pool worksheets matched to two different Global Loan Numbers in two different Securitizations. I understand this is because Nomura repurchased these loans from the first Securitization and subsequently included them in the second Securitization. *See* Note 1 to Grice Exhibit 2. Therefore, these loans each appear in two rows in the Master Database, one matching to each relevant Global Loan Number and Securitization.

12. I included certain additional data points in the Master Database. I included columns listing (1) the loans' originators, (2) the Global Loan Number,⁷ (3) whether the loans were included in FHFA's re-underwriting sample, (4) Mr. Hunter's conclusion regarding the credit risk of the loans, (5) the settlement date of the acquisition pools, (6) the filing date of the Securitizations' prospectus supplements, (7) whether Nomura indicated the loans would be dropped from the acquisition pools, (8) the final credit and compliance diligence grades of the loans,⁸ and (9) the channel by which Nomura purchased the acquisition pools.

13. To add these data points, I took the following steps associated with each column: (1) used the names of the acquisition pools to extract originator names,⁹ (2) matched the loan numbers and alternative loan numbers in the Master Database to those associated with the Global Loan Numbers, (3) matched the Global Loan Numbers included in the Hunter Report Exs. 2A and 2B, which represent the sample loans that were re-underwritten, (4) obtained Mr. Hunter's conclusions about the loans from column "Loan Level Conclusion" of those exhibits, (5) imported pool settlement date information from Column F of the Nomura Trade List, (6)

⁷ In some instances, loans from different acquisition pools matched to the same Global Loan Number. I only matched a Global Loan Number to the loan appearing in the latest-in-time acquisition pool (*i.e.*, if a loan appeared in the ResMAE SP01 and ResMAE SP02 pools, I only matched a Global Loan Number to the loan in the ResMAE SP02 pool, relying on data showing that ResMAE SP02 occurred later in time than ResMAE SP01).

⁸ Because of the difference in the types of loan numbers (*e.g.*, Seller Loan ID, LMS LoanID, Nomura LoanID, etc.) used in the Master Database and Credit and Compliance Database, discussed below, final credit and compliance diligence grades only appear for loans that have Global Loan Numbers, meaning they were securitized in the relevant Securitizations.

⁹ I associated the following pool names with the following originators: ABC with Alliance CA; Bam with Baltimore; Cameron Financial with Cameron; FNLC with First NLC; Horizon Direct with Horizon; Metro with Metrocities; Millennium with Millennium Funding; MSTOR and The Mortgage Store with Mtg Store; NYM, NYMTG, and the one loan that is unassigned to an acquisition pool with NY MTG; NTO with Nation One; PDF with Pinnacle Direct; PFC, Pinfin, and PinnFinn with Pinnacle Financial; Soma Financial with Soma; SSM with Silver State; and STW with Steward.

imported prospectus supplement filing date information from Amended Complaint Table 3, (7) where available, noted whether a loan appeared in an “eligible” or “dropped” tab in the worksheets underlying Grice Exhibits 2 and 3,¹⁰ (8) imported final credit and compliance diligence grades from the Credit and Compliance Database, as described in more detail below, and (9) imported the channel classifications provided by Mr. Grice for 186 of the acquisition pools in Grice Exhibit 3.

C. The Credit and Compliance Database

14. I created the “Credit and Compliance Database,” attached as **PX 1575**. The Credit and Compliance Database is composed of loan-level credit and compliance diligence reports produced by Nomura and Clayton for 190¹¹ of the 194 acquisition pools from which the relevant SLGs were constructed. Based on Grice Exhibit 2, I understand that these 190 pools include 15,666 of the loans in the SLGs, which represents approximately 99% of the total loans in the SLGs.

15. Certain columns in the Credit and Compliance Database were created using different but similar column names from the various underlying diligence reports. Column names in the Credit and Compliance Database requiring harmonization of multiple field names include the following: “Loan Number” (consists of Loan Number, Loan Num, and T1LNNU), “Final Credit Grade” (consists of Final Credit Event, Credit Rating, Credit Event, Credit Event

¹⁰ I used the worksheet name to determine the eligibility status. For each loan pool, I treated a loan as “eligible” if it appeared in a tab that included the words “eligible,” “marked,” “eligible” [sic], “funding,” “Side_Letter,” “Alliance_CA_SP02,” and “FNMA_Point_Fail.” Loan numbers in the remaining tabs were treated as “dropped.” Where a loan was included in a tab with the word “eligible” and a tab that typically would be treated as “dropped,” I treated the loan as “eligible.”

¹¹ Data regarding diligence was unavailable for four loan pools: Bam 53, Home Loan SP01, Kay 06, and Loan Center 31.

Grade, and A1WVEVTT), “Final Compliance Grade” (consists of Final Compliance Event, Comp Rating, Compliance Event, Compliance Event Grade, and A1WVEVTT), “Interim Credit Grade” (consists of Final Credit Event, Credit Rating, and Credit Event Grade), “Interim Compliance Grade” (consists of Final Compliance Event, Compliance Rating, Comp Rating, and Compliance Event Grade), “Outstanding Credit Exceptions” (consists of Outstanding Material Credit Exceptions, Outstanding Material Exceptions, Credit Exceptions, Material Credit Categories, and EXDS), “Outstanding Compliance Exceptions” (consists of Outstanding Material Compliance Exceptions, Compliance Exceptions, Material Compliance Categories, and EXDS), and “General Comments” (consists of General Comments and Comments – General).

16. The columns “Loan Number,” “Final Credit Grade,” and “Final Compliance Grade” were imported from the latest-dated credit and compliance diligence reports produced by Nomura or Clayton that contained the loans subject to credit and compliance diligence.¹²

17. For 98 of the 194 acquisition pools from which the relevant SLGs were constructed,¹³ the columns “Interim Credit Grade,” “Interim Compliance Grade,” “Outstanding

¹² For all but three pools, these reports took one of the following formats: Clayton Event Status Reports, Clayton Exception Detail Reports, AMC Event Status Reports, or AMC Exception Details Reports. For two pools, PDF12 and PinnFinn 26, these reports were “Data Uploads.” For the remaining pool, Pinnacle Financial 29, data was extracted from a Clayton worksheet named “Nomura – Final Data Dump.” I only imported data for loans from the following directory: \CGI\ARCHIVE\CLAS\DEALDATA\NOMURA\PIN29611\CLAS. I imported data from the column “A1WVEVTT” into the “Final Credit Grade” column and imported data from the column “EXDS” into the “Outstanding Credit Exceptions” column if column “EXGP” contained “CRED.” Similarly, I imported data from the column “A1WVEVTT” into the “Final Compliance Grade” column and imported data from the column “EXDS” into the “Outstanding Compliance Exceptions” column if column “EXGP” contained “CMPL.” For loans where only a credit or compliance grade appears, I have noted that the other grade is “unknown” in the Credit and Compliance Database.

¹³ I understand that these 98 pools fell into one or more of the following categories: (1) the originator of the pool originated at least 0.5% of the loans in the SLGs; (2) the originator of the pool originated at least 5% of the loans in a single SLG; (3) the pool contained at least 30

Credit Exceptions,” “Outstanding Compliance Exceptions,” “Non-Material Exceptions,” “Waived / Satisfied Exceptions,” “Compensating Factors,” “Nomura Comments,” “Client Comments,” “Lender Comments,” and “General Comments” were imported from the various interim iterations of credit and compliance diligence reports produced by Nomura or Clayton. Based on Grice Exhibit 2, I understand that these 98 pools include 15,140 SLGs loans, which represents more than 95% of all loans in the SLGs. Where a loan number appeared in multiple versions of these interim reports, I imported information from the latest-dated interim report on which the specific loan number appeared. The column “Date Last Graded”¹⁴ provides the date of the report from which I imported the data.¹⁵ I also imported Securitization names, SLG flags, Hunter sample flags and Mr. Hunter’s conclusion regarding the credit risk of a loan, and Global Loan Numbers from the Master Database for each of the loans in the Credit and Compliance Database.

18. Finally, due to different naming conventions across the various spreadsheets, I created columns named “Standardized Final Credit Grade” and “Standardized Final Compliance Grade,” which standardize values for the data in the “Final Credit Grade” and “Final Compliance Grade” columns, and columns named “Standardized Interim Credit Grade” and “Standardized Interim Compliance Grade,” which standardize values for the data in the “Interim Credit Grade” and “Interim Compliance Grade” columns. All four standardized columns contain the following data points: “1,” “2,” “2W,” “3,” and blank.

loans that were securitized in the SLGs; and/or (4) the pool contained at least three loans in Mr. Hunter’s re-underwriting sample.

¹⁴ I named this column “Date Last Graded.”

¹⁵ Pools First NLC SP01, Fremont SP02, ResMAE SP01, and OwnIt SP01 were only imported when interim data contained credit or compliance grades of 3.

19. A data point of “1” in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to values in the “Final Credit Grade” and “Interim Credit Grade” columns, respectively, beginning with “1.”

20. Similarly, a data point of “1” in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to values in the “Final Compliance Grade” and “Interim Compliance Grade” columns, respectively, beginning with “1.”

21. A data point of “3” in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to values in the “Final Credit Grade” and “Interim Credit Grade” columns, respectively, beginning with “3.”

22. Similarly, a data point of “3” in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to values in the “Final Compliance Grade” and “Interim Compliance Grade” columns, respectively, beginning with “3.”

23. I then bifurcated loans that contained a “2” in the “Final Credit Grade” and “Final Compliance Grade” columns into two categories in the “Standardized Final Credit Grade” and “Standardized Final Compliance Grade” columns: “2” and “2W.” I understand that a grade of “2W” means that the client of Clayton, in this case, Nomura, “waived” an issue related to a loan’s credit or compliance grade.¹⁶

24. I also understand that a data point of “2W” in the “Standardized Final Credit Grade” column corresponds to the following values in the “Final Credit Grade” column: “2W:

¹⁶ To familiarize myself with Clayton’s credit and compliance grades, I reviewed a Clayton underwriter manual (PX 36 at 68).

Material exceptions waived” and “4.”¹⁷ In addition, loans beginning with a “2” (not “2W”) in the “Final Credit Grade” column contain a “2W” in the “Standardized Final Credit Grade” column if the “Standardized Interim Credit Grade” column contains a “3” or “2W.”

25. I also understand that a data point of “2W” in the “Standardized Final Compliance Grade” column corresponds to the following values in the “Final Compliance Grade” column: “2W: Material exceptions waived” and “4.” In addition, loans that began with “2” (not “2W”) in the “Final Compliance Grade” column contain a “2W” in the “Standardized Final Compliance Grade” column if the “Standardized Interim Compliance Grade” column contains a “3” or “2W.”

26. A data point of “2” in the “Standardized Final Credit Grade” column corresponds to values in the “Final Credit Grade” column beginning with a “2,” to the extent the loans did not fall within the category in paragraph 24 that resulted in a “2W” in the “Standardized Final Credit Grade” column.

27. A data point of “2” in the “Standardized Final Compliance Grade” column corresponds to values in the “Final Compliance Grade” column beginning with a “2,” to the extent the loans did not fall within the category in paragraph 25 that resulted in a “2W” in the “Standardized Final Compliance Grade” column.

28. A data point of “2W” in the “Standardized Interim Credit Grade” column corresponds to the following values in the “Interim Credit Grade” column: “2W: Material exceptions waived” and “4.”

¹⁷ I understand that a grade of “4” means that the client of American Mortgage Consultants (“AMC”), in this case, Nomura, “waived” an issue related to a loan’s credit or compliance grade, based on a document produced by Nomura (**PX 483**).

29. A data point of “2W” in the “Standardized Interim Compliance Grade” column corresponds to the following values in the “Interim Compliance Grade” column: “2W: Material exceptions waived” and “4.”

30. A data point of “2” in the “Standardized Interim Credit Grade” column corresponds to values in the “Interim Credit Grade” column beginning with “2,” other than the value “2W.”

31. A data point of “2” in the “Standardized Interim Compliance Grade” column corresponds to values in the “Interim Compliance Grade” column beginning with “2,” other than the value “2W.”

32. A blank entry in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to the following values in the “Final Credit Grade” and “Interim Credit Grade” columns: Blank entry, “N/A,” or “Not Available.”

33. A blank entry in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to the following values in the “Final Compliance Grade” and “Interim Compliance Grade” columns: Blank entry, “N/A,” or “Not Available.”

D. The Valuation Database

34. The next database I created is the “Valuation Database,” attached as **PX 1576**. The Valuation Database (construction of which is described below) consists of 15,683 loans in the relevant SLGs, but excludes the 122 loans from the Loan by Loan Channel and the single loan identified in the expert report of Charles Grice for which he did not identify a pool.¹⁸ I included columns listing the Securitization, Loan Pool (named “PoolName”), Global Loan

¹⁸ See Note 2 to Grice Exhibit 2.

Number, LMSLoanID (named “Loan Number”), and whether or not each loan was included in Mr. Hunter’s sample.

35. I imported several columns from worksheets produced by Nomura. These worksheets are listed in the “Source” section of **Appendix C**. The “Mapping” section of **Appendix C** provides additional detail on which columns from the underlying worksheets were used to populate each of the destination columns.

36. In some instances, multiple sources contained columns that would map to the same destination columns in the Valuation Database. The “Rules” section of **Appendix C** describes the prioritization rules used to populate data in the Valuation Database.

37. Additionally, due to some data shifting identified in the three workbooks referenced below, I shifted data into the proper columns manually before incorporating into the Valuation Database. In the “Eligible” tab of **PX E0766**, I adjusted rows 46 and 47 to match the data to the column headers. I made a similar adjustment to rows 113-115 in the “Eligible” tab of **PX E0732**. Finally, in the “Eligible Marked” tab of **PX E0761**, I adjusted all columns starting with Column E.

38. I added Original Balance and Original LTV information from the loan tapes produced by Nomura. The mapping for whether loan pools were to be designated CoreLogic or Hansen is provided in the “Vendor” tab of **Appendix C**.

39. Similarly, I applied certain thresholds—either 10% or 15%—to certain loan pools for requested analyses. The mapping for which thresholds to apply to which loan pools is provided in the “Percentage” tab of **Appendix C**.

40. Finally, I calculated various derived values from the mapped values in the Valuation Database. Descriptions of the formulas are detailed in the “Formulas” section of **Appendix C**.

E. The RBS Credit and Compliance Database

41. The next database I created is the “RBS Credit and Compliance Database,” attached as **PX 1577**. The RBS Credit and Compliance Database is composed of loan-level credit and compliance diligence reports produced by RBS and Clayton for the NHELI 2007-1 and NHELI 2007-2 Securitizations.¹⁹

42. The “Loan Number,” “Final Credit Event,” “Final Compliance Event,” and “Loan Review Status” columns consist of data from columns bearing the same names in the latest-dated Clayton Event Status Reports produced by RBS or Clayton for the NHELI 2007-1 and NHELI 2007-2 Securitizations.

43. The columns “Outstanding Material Credit Exceptions,” “Outstanding Material Compliance Exceptions,” “Non-Material Exceptions,” “Waived / Satisfied Exceptions,” “Compensating Factors,” and “General Comments” consist of data from columns bearing the same names in various interim iterations of Clayton Exception Detail Reports produced by RBS or Clayton. The columns “Interim Credit Grade” and “Interim Compliance Grade” consist of data from the “Credit Event Grade” column and “Compliance Event Grade” column, respectively, in various interim iterations of Clayton Exception Detail Reports produced by RBS

¹⁹ I understand that RBS conducted credit and compliance diligence on a combined sample of loans in Groups II-1 and II-2 of the NHELI 2007-1 Securitization and that the relevant SLG is Group II-1. I understand that RBS conducted credit and compliance diligence on a sample from the entire NHELI 2007-2 Securitization. As such, the RBS Credit and Compliance Database and RBS Sampling Database, discussed below, only contain loans from Group II of NHELI 2007-1 but include loans from every group of NHELI 2007-2.

or Clayton. Where a loan number appeared in multiple versions of these reports, I imported information from the latest-dated report on which the specific loan number appeared. The column “Date Last Graded” provides the date of the report from which I imported the data.

44. I also imported Securitization names, SLG flags, Hunter sample flags and Mr. Hunter’s conclusion regarding the credit risk of a loan, Global Loan Numbers, originator names, and Nomura final credit and compliance grades from the Master Database for each of the loans in the RBS Credit and Compliance Database.

45. Finally, due to different naming conventions across the various spreadsheets, I created columns named “Standardized Final Credit Grade” and “Standardized Final Compliance Grade,” which standardize values for the data in the “Final Credit Grade” and “Final Compliance Grade” columns, and columns named “Standardized Interim Credit Grade” and “Standardized Interim Compliance Grade,” which standardize values for the data in the “Interim Credit Grade” and “Interim Compliance Grade” columns. All four standardized columns contain the following data points: “1,” “2,” “2W,” “3,” and blank rows.

46. A data point of “1” in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to values in the “Final Credit Grade” and “Interim Credit Grade” columns, respectively, beginning with “1.”

47. Similarly, a data point of “1” in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to values in the “Final Compliance Grade” and “Interim Compliance Grade” columns, respectively, beginning with “1.”

48. A data point of “2” in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to values in the “Final Credit Grade” and “Interim Credit Grade” columns, respectively, beginning with “2” (but not “2W”).

49. Similarly, a data point of “2” in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to values in the “Final Compliance Grade” and “Interim Compliance Grade” columns, respectively, beginning with “2” (but not “2W”).

50. A data point of “2W” in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to values in the “Final Credit Grade” and “Interim Credit Grade” columns, respectively, beginning with “2W.”

51. Similarly, a data point of “2W” in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to values in the “Final Compliance Grade” and “Interim Compliance Grade” columns, respectively, beginning with “2W.”

52. A data point of “3” in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to values in the “Final Credit Grade” and “Interim Credit Grade” columns, respectively, beginning with “3.”

53. Similarly, a data point of “3” in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to values in the “Final Compliance Grade” and “Interim Compliance Grade” columns, respectively, beginning with “3.”

54. A blank entry in the “Standardized Final Credit Grade” and “Standardized Interim Credit Grade” columns corresponds to the following value in the “Final Credit Grade” and “Interim Credit Grade” columns: Blank entry or “Not Available.”

55. A blank entry in the “Standardized Final Compliance Grade” and “Standardized Interim Compliance Grade” columns corresponds to the following value in the “Final Compliance Grade” and “Interim Compliance Grade” columns: Blank entry or “Not Available.”

F. The RBS Valuation Database

56. The final database I created is the “RBS Valuation Database,” attached as **PX 1578**. I understand that the RBS Valuation Database is composed of loan-level “drive-by” valuation diligence worksheets produced by RBS for the NHELI 2007-1 and NHELI 2007-2 Securitizations.²⁰

57. The “Loan Number” column consists of data from the “Loan #” column in the underlying worksheets. The “Original Balance,” “Collateral Value,” “LTV,” “Nationwide Drive-by Value,” “\$ Variance,” “% Variance,” and “Nationwide Drive-by Based LTV” columns consist of data from columns bearing the same names in the underlying worksheets. The “Original LTV (loan tape)” column consists of data from the “LTV” and “Orig. LTV” columns in the NHELI 2007-1 and NHELI 2007-2 loan tapes, respectively.

58. I also imported Securitization names, SLG flags, and Global Loan Numbers from the Master Database for each of the loans in the RBS Valuation Database.

59. Finally, I created a new column called “Nationwide Drive-by LTV > Original LTV,” which indicates whether the LTV ratio based on RBS’s valuation diligence was greater than the LTV ratio provided in the NHELI 2007-1 and NHELI 2007-2 loan tapes.

60. As illustrated in the RBS Valuation Database, there are 133 loans for which the “Nationwide Drive-by Based LTV” column contains data. Of those, 84, or 63.16%, have values in the “Nationwide Drive-by Based LTV” column that are greater than the values in the “Original LTV” column.

²⁰ As with credit and compliance diligence, RBS conducted valuation diligence on a sample of loans from Group II of NHELI 2007-1. Therefore, the RBS Valuation Database only contains loans from this group of NHELI 2007-1 but includes loans from every group of NHELI 2007-2.

II. The Time Gap between Acquisition Settlement Dates and the Closing of the Securitizations

61. To analyze the gap between the time when Nomura purchased a loan and when the loan was securitized, I calculated the number of days between the settlement dates of the acquisition pools and the filing dates of the prospectus supplements related to the Securitizations.

62. I used the column “Date Prospectus Supplement Filed” in the Amended Complaint Table 3 for the prospectus supplement filing dates. I used the dates in column “Settlement Date” of the Master Database for the acquisition pool settlement dates. The Master Database contains settlement date information for 15,679 of the 15,806 loans in the SLGs. The Master Database does not contain settlement date information for the 122 loans Nomura acquired through the loan-by-loan channel, the single loan identified in the expert report of Charles Grice, and the four loans in The Mortgage Store SP01 acquisition pool.

63. The results of my analysis are shown below in Table 1 (PX 1579). Because of the missing settlement dates for the 127 loans described above, the figures are calculated out of a total of 15,679 loans, or 99.2% of the loans in the SLGs.

Table 1 [PX 1579]
The Time Gap between Acquisition Settlement Dates and the Closing of the Securitizations

Securitization	Loan Count	0 - 30 days	31 to 60 days	61 to 90 days	91 to 120 days	121 to 150 days	151 to 180 days	Greater than 180 days
NAA 2005-AR6	325	0	29	226	57	0	13	0
NHELI 2006-FM1	2532	0	0	2532	0	0	0	0
NHELI 2006-FM2	3891	0	0	0	0	3891	0	0
NHELI 2006-HE3	3613	0	0	304	1064	538	1201	506
NHELI 2007-1	403	14	125	184	79	1	0	0
NHELI 2007-2	3001	0	1438	0	208	320	458	577
NHELI 2007-3	1914	0	0	35	18	952	61	848
Total:	15,679	14	1,592	3,281	1,426	5,702	1,733	1,931

64. As Table 1 shows, of the 15,679 loans in the relevant SLGs with settlement dates available, 14 loans were securitized within 30 days, 1,592 were securitized between 31 and 60 days, 3,281 were securitized between 61 and 90 days, 1,426 were securitized between 91 and 120 days, 5,702 were securitized between 121 and 150 days, 1,733 were securitized between 151 and 180 days, and 1,931 were securitized at least 181 days after they were purchased by Nomura.

65. Based on these figures, 10,792 loans, or 68.8% of the loans in the relevant SLGs with settlement dates available, were securitized more than 90 days (three months) after they were purchased by Nomura. Of those, 9,366, or 59.7% of the loans in the relevant SLGs with settlement dates available, were securitized more than 120 days (four months) after they were purchased by Nomura, 3,664, or 23.4% of the loans in the relevant SLGs with settlement dates available, were securitized more than 150 days (five months) after they were purchased by Nomura, and 1,931, or 12.3% of the loans in the relevant SLGs with settlement dates available, were securitized more than 180 days (six months) after they were purchased by Nomura.

66. As Table 1 shows, for certain Securitizations, Nomura purchased some loans at least 120 days (four months) before the close of the Securitization. Specifically, for the NHELI 2006-FM2 Securitization, Nomura purchased every loan in the SLG more than 120 days (four months) before securitization. For the NHELI 2007-3 Securitization, Nomura purchased 1,861 loans in the relevant SLG, or 97.2% of the SLG, at least 120 days (four months) before securitization. Of those, Nomura purchased 848, or 44.3% of the SLG, more than 180 days (six months) before securitization. In the NHELI 2006-HE3 Securitization, Nomura purchased 1,707 loans in the relevant SLG, or 47.2% of the SLG, more than 150 days (five months) before securitization.

III. The Number of Loans in the SLGs That Were Subject to Credit Diligence and Received a Final Credit Grade of EV1, EV2, EV2W, or EV3

67. AlixPartners determined the number of loans in the relevant SLGs that were subject to credit diligence review and received certain credit grades during that review. Specifically, AlixPartners was asked to determine the number and percentage of loans in the relevant SLGs that had received final credit grades of “1,” “2,” “2W,” or “3,” according to the Credit and Compliance Database.

68. To complete this task, I identified the loans in the relevant SLGs subject to credit diligence review, based on the Credit and Compliance Database.²¹ I then aggregated the grading information for the loans in the SLGs from the column “Standardized Final Credit Grade.” The available data points in these fields are “1,” “2,” “2W,” and “3.” For purposes of this analysis, I excluded loans that did not contain one of these data points in the “Standardized Final Credit Grade” column.

69. Table 2 (**PX 1580**) below contains the results of the analysis of final credit grades associated with the loans in the relevant SLGs. Table 2 provides the number of loans in the relevant SLGs that were subject to diligence, based on the 190 pools in the Credit and Compliance Database, and contained “Standardized Final Credit Grade” values of “1,” “2,” “2W,” or “3.” For each of the four “standardized” grades, I divided the number of loans by the total number of loans subject to credit diligence review, based on the 190 pools in the Credit and Compliance Database, and then expressed this figure as a percentage.

²¹ As noted above, the Credit and Compliance Database consists of credit and compliance diligence reports for 190 of the 194 acquisition pools. As such, my analysis is based only on the credit grades of loans in those 190 pools.

70. As Table 2 shows, of the 6,162 loans subject to credit diligence, 4,487 loans received a final credit grade of “1,” 1,134 received a final credit grade of “2,” 373 received a final credit grade of “2W,” and 168 received a final credit grade of “3.”

**Table 2 [PX 1580]
Final Credit Grades for SLG Loans**

Securitization	Number of Loans in At-Issue SLG	SLG Loans Subject to Credit DD Count	SLG Loans Subject to Credit DD Percentage	Final EV1 Credit Grade		Final EV2 Credit Grade		Final EV2W Credit Grade		Final EV3 Credit Grade	
				SLG Loan Count	Percentage	SLG Loan Count	Percentage	SLG Loan Count	Percentage	SLG Loan Count	Percentage
NAA 2005-AR6	376	252	67.02%	176	69.84%	49	19.44%	21	8.33%	6	2.38%
NHELI 2006-FM1	2532	669	26.42%	453	67.71%	178	26.61%	38	5.68%	0	0.00%
NHELI 2006-FM2	3891	837	21.51%	750	89.61%	55	6.57%	14	1.67%	18	2.15%
NHELI 2006-HE3	3618	1967	54.37%	1495	76.00%	263	13.37%	150	7.63%	59	3.00%
NHELI 2007-1	474	335	70.68%	204	60.90%	81	24.18%	12	3.58%	38	11.34%
NHELI 2007-2	3001	1346	44.85%	889	66.05%	315	23.40%	109	8.10%	33	2.45%
NHELI 2007-3	1914	756	39.50%	520	68.78%	193	25.53%	29	3.84%	14	1.85%
Total:	15,806	6,162	38.99%	4,487	72.82%	1,134	18.40%	373	6.05%	168	2.73%

IV. Nomura’s Post-Closing Quality Control Review

71. Using **PX 659**, which I understand relates to Nomura’s post-closing quality control review of a sample of loans from various acquisition pools, including 13 pools that fed into the SLGs (“Post-Closing QC Worksheet”), I added the following data points to the Post-Closing QC Worksheet: Securitization, whether the loan was in a relevant SLG, and the standardized final credit and compliance diligence grades for the loan, where available.²² The results of my analysis are included in **PX 1596**.

²² The following pools in the Post-Closing QC Worksheet had credit and compliance grades available in the Credit and Compliance Database: Allstate SP07, Allstate SP08, Equifirst

72. I then created a chart based on the addition of these data points and based on certain columns in the Post-Closing QC Worksheet. I understand that the column “Overall Event Level” reflected the credit grade assigned to a given loan based on the post-closing quality control review. I was also asked to assume that values in the column “StatusDetailDD” had the following meanings: (1) “Not Sampled” meant a loan was not subject to credit and compliance diligence at acquisition; (2) “Within Seller’s Guidelines” meant a loan received a credit grade of “1” at acquisition diligence; and (3) “Outside Seller’s Guidelines with comp factors” meant a loan received a credit grade of “2” at acquisition diligence.

73. The chart tracks the number of loans graded a “0,” “3,” or “4” in the post-closing quality control review,²³ based on the values in the column “Overall Event Level,” and provides the overlap between these loans and (1) loans in the SLGs; (2) loans not subject to credit and compliance diligence at acquisition, based on a value of “Not Sampled” in the column “StatusDetailDD;” (3) loans that received a credit grade of “1” at acquisition, based on a value of “Within Seller’s Guidelines” in the column “StatusDetailDD;” and (4) loans that received a credit grade of “2” at acquisition, based on a value of “Outside Seller’s Guidelines with comp factors” in the column “StatusDetailDD.” The results of my analysis are included below in Table 3 (**PX 1581**).

SP01, Fund America SP03, Novastar SP02, Ownit SP01, Peoples Choice SP01, and United SP01.

²³ It is my understanding that grades assigned during the post-closing quality control review are defined as follows: “0” corresponds with “loans that were not delivered” (**PX 657**); “3” corresponds with a loan that “falls outside the originator guidelines and deemed to be a potential default risk . . . even after compensating factors are taken into consideration” (**PX 884** at 2); and “4” corresponds with a loan “missing critical documentation to determine loan eligibility” (*id.*).

**Table 3 [PX 1581]
Post-Closing QC Review Findings (Aug. 24, 2006)**

Category	Total	Total EV0, EV3, & EV4	Percentage of EV0, EV3, & EV4	Total EV3 & Total EV4	Percentage of EV3 & EV4
All Loans in Post-Closing QC Review	189	77	40.7%	57	30.2%
Post-Closing QC Review Loans that Overlap with SLGs	39	11	28.2%	11	28.2%
Post-Closing QC Review Loans not Diligenced at Acquisition	65	29	44.6%	20	30.8%
Post-Closing QC Review Loans with EV1 Credit Grade at Acquisition	84	30	35.7%	25	29.8%
Post-Closing QC Review Loans with EV2 Credit Grade at Acquisition	36	17	47.2%	11	30.6%

V. RBS's Post-Securitization Fraud and Data Discrepancy Review

74. Using **PX 395**, which I understand relates to RBS's post-securitization fraud and data discrepancy review of a sample of loans from the NHELI 2006-HE3 Securitization ("RBS Post-Securitization Fraud Review Worksheet"), I added the following data points to the RBS Post-Securitization Fraud Review Worksheet: whether the loan was in a relevant SLG and the final standardized credit and compliance grades for the loan, where available. The results of my analysis are included in **PX 1597**.

75. I then created a chart based on the addition of these data points and based on certain columns in the RBS Post-Securitization Fraud Review Worksheet. The chart tracks the number of loans with an "X" in the "REPURCHASE RECOMMENDATION?" column and provides the overlap between these loans and (1) loans in the SLGs; (2) loans not subject to credit and compliance diligence at acquisition; and (3) loans that received a credit grade of "1" or

“2” at acquisition, based on the “Standardized Final Credit Grade” column in the Credit and Compliance Database. The results of my analysis are included below in Table 4 (PX 1582).²⁴

**Table 4 [PX 1582]:
Post Securitization Fraud Review Findings for NHELI 2006 HE3 (Apr. 13, 2007)**

Category	Total	Total Recommended for Repurchase	Percentage Recommended for Repurchase
All Loans in Post Securitization Fraud Review	68	43	63.2%
Post Securitization Fraud Review Loans that Overlap with SLGs	34	19	55.9%
Post Securitization Fraud Review Loans not Diligenced at Acquisition	35	21	60.0%
Post Securitization Fraud Review Loans with EV1 Credit Grade at Acquisition	28	19	67.9%
Post Securitization Fraud Review Loans with EV2 Credit Grade at Acquisition	4	2	50.0%

VI. Nomura’s Post-Securitization Fraud Review

76. Using PX 816, which I understand relates to Nomura’s post-securitization fraud review of a sample of loans from the NHELI 2007-1 Securitization (“Nomura Post-Securitization Fraud Review Worksheet”), I added the following data points to the Nomura Post-Securitization Fraud Review Worksheet: whether the loan was in a relevant SLG and the final credit and compliance grades for the loan, where available.²⁵ The results of my analysis are included in PX 1598.

²⁴ The source file used in creating PX 1597 and PX 1582 included a loan assigned loan number ‘[REDACTED]’. This “loan number” appears to be included in error and has been omitted from the data included in PX 1597 and PX 1582.

²⁵ All but four of the pools in the Post-Securitization Fraud Review Worksheet (BAM53, KAY06, RATELOCK, and LOAN CENTER 31) had credit and compliance grades available in the Credit and Compliance Database.

77. I then created a chart based on the addition of these data points and based on certain columns in the Nomura Post-Securitization Fraud Review Worksheet. The chart tracks the number of loans with a “3” in the “Fraud Score” column and provides the overlap between these loans and (1) loans in the SLGs; (2) loans not subject to credit and compliance diligence at acquisition;²⁶ and (3) loans that received a credit grade of “1” or “2” at acquisition, based on the “Standardized Final Credit Grade” column in the Credit and Compliance Database. The results of my analysis are included in Table 5 (PX 1583) below.

**Table 5 [PX 1583]
Post-Securitization Fraud Review Findings for NHELI 2007-1 (July 20, 2007)**

Category	Total	Total Fraud Score = 3	Percentage Fraud Score = 3
All Loans in Post-Securitization Fraud Review	102	19	18.6%
Post-Securitization Fraud Review Loans that Overlap with SLGs	17	2	11.8%
Post-Securitization Fraud Review Loans not Diligenced at Acquisition	25	8	32.0%
Post-Securitization Fraud Review Loans with EV1 Credit Grade at Acquisition	37	4	10.8%
Post-Securitization Fraud Review Loans with EV2 Credit Grade at Acquisition	6	0	0.0%

²⁶ I understand that the absence of a standardized final credit and standardized final compliance grade in the Credit and Compliance Database for loans included in a Securitization means that these loans were not subject to diligence at acquisition. Because loans from the BAM53, KAY06, RATELOCK, and LOAN CENTER 31 pools are not included in the Credit and Compliance Database, I did not include these loans in this count. KAY06 did not contribute loans to the at-issue SLGs.

VII. The Number of Loans Dropped From the Acquisition Pools

78. I reviewed the Master Database to determine the percentage of loans listed as “Dropped” for each of 31 loan pools.²⁷ To perform this analysis, I first filtered the column “Pool Name” for the relevant loan pool to get the “Deal Loan Count.” To get the “Dropped Loan Count,” I then filtered the column “Drop Status” to show “Dropped,” and filtered the column “Deal Name” to “(Blanks).” In “Dropped Loan Count” column of Table 6 below, I recorded the number of loans listed as “Dropped” for each listed loan pool. I also recorded the “Deal Loan Count” for each loan pool. Dividing the number of loans listed as “Dropped” for each loan pool by the total number of loans in the loan pool (the “Deal Loan Count”), I recorded the percentage of “Dropped” loans in the “Pct Dropped” column. The results of this analysis are reflected below in Table 6 (**PX 1584**).

²⁷ See *supra* ¶ 13 & n.10. Counsel selected the 31 loan pools based on the percentage of loans subjected to credit and compliance diligence, as identified in Grice Exhibit 3. The 31 pools comprise those pools with sampled loan percentages less than 89% of the total loan pool.

Table 6 [PX 1584]
Drop Rates for 31 Sampled Loan Pools

Pool Name	Deal Loan Count	Dropped Loan Count	Pct Dropped
Alliance CA 04	420	4	0.95%
Cameron Financial SP04	29	3	10.34%
Equifirst SP01	263	34	12.93%
Equifirst SP02	763	136	17.82%
Equifirst SP03	269	47	17.47%
First NLC SP02	480	34	7.08%
First NLC SP03	901	83	9.21%
FNBN 21	643	66	10.26%
Fremont SP02	4997	324	6.48%
Fremont SP03	4616	518	11.22%
Fremont SP04	2666	323	12.12%
Gateway 17A	171	11	6.43%
Gateway 24A	95	8	8.42%
Impac SP04	333	60	18.02%
Mandalay SP03	360	4	1.11%
Metro 10	78	1	1.28%
Novastar SP02	633	99	15.64%
Ownit SP02	2805	229	8.16%
Peoples Choice SP01	1568	161	10.27%
Peoples Choice SP02	1134	127	11.20%
Pinnacle Financial 07	149	6	4.03%
Resmae SP01	4296	311	7.24%
Resmae SP02	3141	435	13.85%
Silver State 62	386	18	4.66%
Silver state 63	214	7	3.27%
Silver State 65	112	6	5.36%
Silver state 66	77	9	11.69%
SSM 58	137	35	25.55%
SSM 60	89	7	7.87%
Wells SP01	5447	417	7.66%
WMC SP01	1441	328	22.76%
Total:	38,713	3,851	9.95%

79. I then determined from the Master Database the deals to which the 31 loan pools contributed loans. Using the data reflected in Table 6, I recorded the total number of loan pools with a “Pct Dropped” greater than 10% in the column “Sampled Pools > 10.” The results of this analysis are reflected below in Table 7 (PX 1585).

Table 7 [PX 1585]
Sampled Loan Pools with Drop Rates Greater than 10%

Deal Name	Sampled Pools	Sampled Pools > 10%
NAA 2005-AR6	4	0
NHELI 2006-FM1	1	0
NHELI 2006-FM2	2	2
NHELI 2006-HE3	9	5
NHELI 2007-1	8	3
NHELI 2007-2	17	10
NHELI 2007-3	15	9

VIII. The Number of Loans in the Relevant SLGs for Which No AVM, BPO, and Final Values Were Obtained

80. I reviewed the Valuation Database to determine both the number of loans in the relevant SLGs and the number of loans in the relevant SLGs lacking AVM Values, BPO Values, and Final Values.²⁸ To determine the number of loans in the relevant SLGs I counted the loans by Securitization. To determine the number of loans in relevant SLGs lacking AVM Values, BPO Values, and Final Values, I counted by Securitization the SLGs where “AVM Value” was blank, “BPO High Value” was blank, and “Final Value” was blank. The results of this analysis are reflected below in Table 8 (PX 1586).

²⁸ “Final Value” corresponds to values in the column “Post Reviewed Value” in the Valuation Database.

Table 8 [PX 1586]
SLG Loans Not Subject to AVM, BPO, and Reconciliation

Securitization	ALL SLG loans in DB	Loans for which No AVM, BPO, and Final Values were Obtained	Percentage
NAA 2005-AR6	325	134	41.2%
NHELI 2006-FM1	2,532	1,604	63.3%
NHELI 2006-FM2	3,891	2,433	62.5%
NHELI 2006-HE3	3,617	1,942	53.7%
NHELI 2007-1	403	104	25.8%
NHELI 2007-2	3,001	1,603	53.4%
NHELI 2007-3	1,914	1,187	62.0%
Total:	15,683	9,007	57.4%

IX. The Number of Loans in the Relevant SLGs for Which F Score Was 0

81. I reviewed the Valuation Database to determine both the number of loans in the relevant SLGs that were sent to CoreLogic and the number of loans sent to CoreLogic that received F Score values of 0. To make this determination, I first filtered the column “Vendor” to equal “CoreLogic” to determine “Total Loans in CoreLogic Pools.” I then filtered the column “HistoryPro F-Score” to 0, to determine “Loans With F Score of 0.” The results of this analysis are reflected below in Table 9 (PX 1587).

Table 9 [PX 1587]
SLG Loans Returning F-Score of 0

	Total Loans in CoreLogic Pools	Loans with F Score of 0	Percentage
Total:	13,783	8,209	59.6%

X. The Number of Loans in the Relevant SLGs for Which the AVM Indicated an Out-Of-Tolerance Appraisal and Nomura Did Not Obtain a BPO

82. I reviewed the Valuation Database to determine both the number of loans in the relevant SLGs where the AVM indicated that the original appraisal was out of tolerance and the

subset of those SLGs where no BPO value was obtained by Securitization.²⁹ To make this determination, I performed the steps below.

83. For loans in pools applying a 10% tolerance, I first filtered the column “PoolName” according to the designations outlined in **Appendix C**. Next, I filtered the column “AVM Variance” to show only values less than -.10 to determine “All AVM Values that fall below 10% Threshold.” I then filtered the column “BPO High Value” to blank entries to determine “AVM Values that fall below 10% Threshold and No BPO.” The results of this analysis are reflected below in Table 10 (**PX 1588**).

**Table 10 [PX 1588]
SLG Loans Outside of 10% AVM Threshold and No BPO**

Securitization	All AVM Values that fall below 10% Threshold, same pools	AVM Values that fall below 10% Threshold and No BPO	Percentage
NAA 2005-AR6	n/a	n/a	n/a
NHELI 2006-FM1	329	161	48.9%
NHELI 2006-FM2	487	178	36.6%
NHELI 2006-HE3	470	178	37.9%
NHELI 2007-1	n/a	n/a	n/a
NHELI 2007-2	344	115	33.4%
NHELI 2007-3	148	47	31.8%
Total:	1,778	679	38.2%

84. For loans in pools applying a 15% tolerance, I first filtered the column “PoolName” according to the designations outlined in **Appendix C**. Next, I filtered the column “AVM Variance” to show only values less than -.15 to determine “All AVM Values that fall below 15% Threshold.” I then filtered the column “BPO High Value” to blank entries to

²⁹ I understand that “out of tolerance” means the AVM value was more than 10% or 15% below the original appraised value, depending on the type of loan pool. Counsel provided me with a list of which pools to apply 10% and which to apply 15%, and designation reflected in **Appendix C**.

determine “AVM Values that fall below 15% Threshold and No BPO.” The results of this analysis are reflected below in Table 11 (PX 1589).

**Table 11 [PX 1589]
SLG Loans Outside of 15% AVM Threshold and No BPO**

Securitization	All AVM Values that fall below 15% Threshold, same pools	AVM Values that fall below 15% Threshold and No BPO	Percentage
NAA 2005-AR6	42	9	21.4%
NHELI 2006-FM1	n/a	n/a	n/a
NHELI 2006-FM2	n/a	n/a	n/a
NHELI 2006-HE3	1	n/a	0.0%
NHELI 2007-1	26	4	15.4%
NHELI 2007-2	n/a	n/a	n/a
NHELI 2007-3	1	n/a	0.0%
Total:	70	13	18.6%

XI. The Number of Loans in the Relevant SLGs with Final LTV Above 100

85. I reviewed the Valuation Database to determine both the number of loans in the relevant SLGs that had a “Final Value” and a subset of those loans that had a Final LTV whose ratio that was above 100.³⁰ I first filtered the column “Final Value” to non-blank values to determine “Loans With Final Value”, I then filtered “Final LTV” to values greater than 1 to determine “Final LTV Greater Than 100.” The results of this analysis are reflected below in Table 12 (PX 1590).

³⁰ “Final LTV” corresponds to values in the column “Post Reviewed LTV” in the Valuation Database.

**Table 12 [PX 1590]
SLG Loans With Final LTV Greater Than 100%**

Securitization	Loans with Final Value	Final LTV Greater Than 100	Percentage
NAA 2005-AR6	63	-	0.0%
NHELI 2006-FM1	303	8	2.6%
NHELI 2006-FM2	626	26	4.2%
NHELI 2006-HE3	613	43	7.0%
NHELI 2007-1	56	4	7.1%
NHELI 2007-2	452	46	10.2%
NHELI 2007-3	265	24	9.1%
Total:	2,378	151	6.3%

XII. The Number of Loans in the Relevant SLGs with Both AVM and BPO Value LTV Above 100

86. I reviewed the Valuation Database to determine both the number of loans in the relevant SLGs that had AVM and BPO values and the subset of those loans in the relevant SLGs where both the AVM and BPO value yielded an LTV that was above 100%. I first filtered “AVM Value” to non-blank entries and “BPO Mean Value” to non-blank entries to determine “Loans with Both AVM and BPO Values.” I then filtered the column “AVM Value LTV” to values greater than 1 and the column “BPO Mean Value LTV” to values greater than 1 to determine “Both AVM and BPO LTV>100.” The results of this analysis are reflected below in Table 13 (**PX 1591**).

Table 13 [PX 1591]
SLG Loans with AVM and BPO LTV Greater Than 100%

Securitization	Loans with Both AVM and BPO Values	Both AVM and BPO LTV > 100	Percentage
NAA 2005-AR6	35	1	2.9%
NHELI 2006-FM1	170	29	17.1%
NHELI 2006-FM2	348	41	11.8%
NHELI 2006-HE3	299	79	26.4%
NHELI 2007-1	22	4	18.2%
NHELI 2007-2	264	70	26.5%
NHELI 2007-3	115	18	15.7%
Total:	1,253	242	19.3%

XIII. The Number of Loans in the Relevant SLGs with Final LTV Differences Above 80 LTV

87. I reviewed the Valuation Database to determine both the number of loans in the relevant SLGs where the Original LTV from the loan tape was less than or equal to 80% and the loan had a Final Value, and the subset of those loans in the relevant SLGs that had a Final LTV greater than 80%. I first filtered the column “Final Value” to non-blank entries and the column “Original LTV (Tape)” to less than or equal to 0.80 to determine “Loans with Final Value and Original LTV At or Below 80.” I then filtered “Final LTV” to values greater than 0.80 to determine “Final LTV Above 80.” The results of this analysis are reflected below in Table 14 (PX 1592).

Table 14 [PX 1592]
SLG Loans With Final Values Pushing LTV From Below 80% to Above 80% Threshold

Securitization	Loans with Final Value and Original LTV At or Below 80	Final LTV Above 80	Percentage
NAA 2005-AR6	63	15	23.8%
NHELI 2006-FM1	187	51	27.3%
NHELI 2006-FM2	502	119	23.7%
NHELI 2006-HE3	309	113	36.6%
NHELI 2007-1	49	20	40.8%
NHELI 2007-2	235	90	38.3%
NHELI 2007-3	150	48	32.0%
Total:	1495	456	30.5%

XIV. The Number of Loans in the Relevant SLGs with AVM and BPO LTV Differences Above 80 LTV

88. I reviewed the Valuation Database to determine both the number of loans in the relevant SLGs where the Original LTV from the loan tape was less than or equal to 80% and there were both an AVM and a BPO performed, and the subset of those loans in the relevant SLGs yielding both an AVM LTV is greater than 80% and a BPO LTV greater than 80%. I first filtered the column “AVM Value” to non-blank entries and the column “BPO Mean Value” to non-blank entries and “Original LTV (Tape)” to less than or equal to 0.80 to determine “Loans with Both AVM and BPO Value and Original LTV At or Below 80.” I then filtered “AVM Value LTV” to values greater than 0.80 and “BPO Mean Value LTV” to values greater than 0.8 to determine “AVM and BPO LTV Above 80.” The results of this analysis are reflected below in Table 15 (**PX 1593**).

Table 15 [PX 1593]
SLG Loans With AVM and BPO Values Pushing LTV
From Below 80 to Above 80 Threshold

Securitization	Loans with Both AVM and BPO Value and Original LTV At or Below 80	AVM and BPO LTV Above 80	Percentage
NAA 2005-AR6	35	17	48.6%
NHELI 2006-FM1	106	45	42.5%
NHELI 2006-FM2	296	112	37.8%
NHELI 2006-HE3	157	83	52.9%
NHELI 2007-1	18	13	72.2%
NHELI 2007-2	136	66	48.5%
NHELI 2007-3	76	34	44.7%
Total:	824	370	44.9%

XV. Nomura's Final Property Values That Were Less than the Values Used to Calculate LTV Ratios in the Loan Tapes Among Loans with Valuation Diligence

89. I used the Valuation Database to determine, for the loans in the relevant SLGs, various groupings of LTV ratios: $LTV \leq 80$, $80 < LTV \leq 100$, and $LTV > 100$, among loans that had an AVM Value, BPO Value, or Final Value. Specifically, I determined the percentage of the loans in the relevant SLGs that fell within the above groupings based on values in the "Original LTV (Tape)" column and the "Greater LTV" column in the Valuation Database. I performed these groupings for loans that included non-blank values for "AVM Value", "BPO Mean Value", or "Final Value." I provided this information for each Securitization. The results of this analysis are included below in Table 16 (PX 1594).

**Table 16 [PX 1594]
SLG Loans With Final Values in Relevant LTV Ranges**

Securitization	LTV≤80		80<LTV≤100		LTV>100	
	Percent Based on Original LTV	Percent Based on Greater LTV	Percent Based on Original LTV	Percent Based on Greater LTV	Percent Based on Original LTV	Percent Based on Greater LTV
NAA 2005-AR6	98.95%	91.10%	1.05%	8.90%	0.00%	0.00%
NHELI 2006-FM1	71.34%	65.84%	28.66%	33.30%	0.00%	0.86%
NHELI 2006-FM2	78.60%	70.44%	21.40%	27.78%	0.00%	1.78%
NHELI 2006-HE3	61.25%	54.51%	38.75%	42.93%	0.00%	2.57%
NHELI 2007-1	89.30%	82.61%	10.70%	16.05%	0.00%	1.34%
NHELI 2007-2	56.37%	49.93%	43.63%	46.78%	0.00%	3.29%
NHELI 2007-3	65.75%	59.15%	34.25%	37.55%	0.00%	3.30%
Totals:	68.24%	61.41%	31.76%	36.32%	0.00%	2.26%

XVI. The Number of Nomura Appraisals Within Ranges of the Sales Price for Sales Transactions

90. I reviewed the Valuation Database to determine the loans for sales transactions where the appraisal value fell within certain ranges of the sales price. To make this determination, I performed the steps below.

91. I filtered the column “Sales Price” to non-blank entries and “Appraisal Value” to non-blank entries to determine the population of loans to analyze. For these loans I calculated both the “Difference” between Appraisal Value and Sales Price as defined by “Appraisal Value” less “Sales Price” and the “Absolute Difference” as defined by the absolute value of “Difference”. I categorized the “Differences” into the following ranges (a) Sales Greater than Appraisals (b) No Difference (c) Difference Between \$1 and up to \$1,000 (d) Difference Between \$1,000 and up to \$2,000 (e) Difference Between \$2,000 and up to \$20,000 and (f) Difference \$20,000 or Greater. With the exception of Sales Greater Than Appraisals, I

categorized the “Absolute Differences” in a similar manner. The results of this analysis are reflected below in Table 17 (PX 1595).

**Table 17 [PX 1595]
Difference Between Appraisal and Sale Value for Certain SLG Loans**

Absolute Difference (Appraisal Value Minus Sales Price)	Number of Loans	Percentage
No Difference	4869	71.66%
Difference Between \$1 and up to \$1,000 (up to approximately 0.5% avg. sale price ³¹)	407	5.99%
Difference Between \$1,000 and up to \$2,000 (up to approximately 1.0% avg. sale price)	269	3.96%
Difference Between \$2,000 and up to \$20,000 (up to approximately 10.0% avg. sale price)	1078	15.86%
Difference \$20,000 or Greater	172	2.53%
Total:	6795	
Difference (Appraisal Value Minus Sales Price)	Number of Loans	Percentage
Sales Greater Than Appraisals	111	1.63%
No Difference	4869	71.66%
Difference Between \$1 and up to \$1,000 (up to approximately 0.5% avg. sale price)	380	5.59%
Difference Between \$1,000 and up to \$2,000 (up to approximately 1.0% avg. sale price)	253	3.72%
Difference Between \$2,000 and up to \$20,000 (up to approximately 10.0% avg. sale price)	1028	15.13%
Difference \$20,000 or Greater	154	2.27%
Total:	6795	

³¹ I calculated the average sales price by summing all loans with a “Sales Price” and dividing by the count of loans with a “Sales Price.” The average sales price is approximately \$206,000.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 5th day of March, 2015 in Dallas, Texas.



Charles Cipione

Exhibit A

EXHIBIT A**Corrected Direct Testimony of Charles Cipione and Exhibits**

Original	Description of Revision
Paragraph 83	Inserted corrected Table 10 [PX 1588].
Paragraph 84	Inserted corrected Table 11 [PX 1589].
Appendix B of Cipione Direct (SQL backup file to Credit and Compliance Database, lines 1057, 1059, and 1064)	Changed “[CC_” and “Event Status]” to “CC_” and “_Event Status” in the original SQL file entitled “Cipione_6201_Affidavit_CreditAndComplianceDB.bak”. The corrected SQL backup file is entitled “Cipione_6201_Affidavit_CreditAndComplianceDB_20150305.bak”.
Appendix B of Cipione Direct (SQL backup file to Valuation Database)	Corrected SQL backup file entitled “Cipione_6201_Affidavit_ValuationDB_20150305.bak” to reflect corrected valuation tolerance thresholds for two loan pools (Horizon SP08 and Millennium Funding SP05).
Appendix C of Cipione Direct	Corrected valuation tolerance threshold for two acquisition loan pools in “Percentage” Tab, rows 80 and 112.
PX 1575	Revised to reflect corrected syntax in script to Credit and Compliance Database.
PX 1576	Revised to reflect corrected valuation tolerance thresholds for two loan pools (Horizon SP08 and Millennium Funding SP05).
PX 1588	Revised to reflect corrected valuation tolerance thresholds for two loan pools (Horizon SP08 and Millennium Funding SP05).
PX 1589	Revised to reflect corrected valuation tolerance thresholds for two loan pools (Horizon SP08 and Millennium Funding SP05).